

What is claimed is:

1           1. A digital broadcast distribution signal  
2 distribution system comprising:

3           two or more distribution centers, communicably  
4 connected to one another through a communication line,  
5 each of said distribution centers for distributing  
6 a digital broadcast distribution signal, which has  
7 been created based on program information received  
8 in each said distribution center, to subscribers  
9 through a CATV (Community Antenna Television) network,  
10 for sending the digital broadcast distribution signal  
11 to another of said distribution centers and for  
12 receiving a digital broadcast distribution signal  
13 from another of said distribution centers; and

14           subscriber terminals, each for receiving a  
15 digital broadcast distribution signal distributed  
16 from one of the distribution centers through the CATV  
17 network so that a subscriber views a program,

18           each said distribution center including a  
19 signal replacement section for replacing the  
20 first-named digital broadcast distribution signal  
21 created based on the program information received in  
22 each said distribution center with the second-named  
23 digital broadcast distribution signal, which each  
24 said distribution center received from another of said  
25 distribution centers, and

26           each of said subscriber terminals including  
27           a distribution plan storage for retaining  
28           channel distribution plans, one representing  
29           distribution setting information of the  
30           first-named digital broadcast distribution  
31           signal of each said distribution center,  
32           a distribution center  
33           discriminating section for discriminating the  
34           one distribution center that has created the  
35           third-named digital broadcast distribution  
36           signal, which is received in each said  
37           subscriber terminal, and  
38           a receiving section for changing, if the  
39           one distribution center is discriminated not  
40           to be a predetermined distribution center, NIT  
41           information of the third-named digital  
42           broadcast distribution signal based on the  
43           channel distribution plans of the one  
44           distribution center and the predetermined  
45           distribution center, and receiving the  
46           third-named digital broadcast distribution  
47           signal.

1           2. A digital broadcast signal distribution  
2           system according to claim 1, further comprising a local  
3           station, communicably connected to one of said  
4           distribution centers, for sending the third-digital

5 broadcast distribution signal from the last-named one  
6 distribution center to subscribers downstream of said  
7 local station without changing at least PSI /SI  
8 (Program Specific Information/Service Information)  
9 of the third digital broadcast distribution signal.

1 3. A digital broadcast signal distribution  
2 system according to claim 1, wherein said signal  
3 replacement section in each said distribution center  
4 replaces the first-named digital broadcast  
5 distribution signal with the second-named digital  
6 broadcast distribution signal in accordance with a  
7 reception state of the first digital broadcast  
8 distribution signal at each said distribution center.

1 4. A digital broadcast signal distribution  
2 system according to claim 2, wherein said signal  
3 replacement section in each said distribution center  
4 replaces the first-named digital broadcast  
5 distribution signal with the second-named digital  
6 broadcast distribution signal in accordance with a  
7 reception state of the first digital broadcast  
8 distribution signal at said each distribution center.

1 5. A digital broadcast signal distribution  
2 system according to claim 1, wherein the CATV network  
3 includes an optical fiber through which the

4       third-named digital broadcast distribution signal is  
5       distributed to each said subscriber terminal.

1               6. A digital broadcast signal distribution  
2       system according to claim 2, wherein the CATV network  
3       includes an optical fiber through which the  
4       third-named digital broadcast distribution signal is  
5       distributed to each said subscriber terminal.

1               7. A digital broadcast signal distribution  
2       system according to claim 3, wherein the CATV network  
3       includes an optical fiber through which the  
4       third-named digital broadcast distribution signal is  
5       distributed to each said subscriber terminal.

1               8. A digital broadcast signal distribution  
2       system according to claim 4, wherein the CATV network  
3       includes an optical fiber through which the  
4       third-named digital broadcast distribution signal is  
5       distributed to each said subscriber terminal.

1               9. A digital broadcast signal distribution  
2       system according to claim 5, wherein analog  
3       transmission is performed on the third-named  
4       broadcast distribution signal while being distributed  
5       to each said subscriber terminal in the CATV network.

1           10. A digital broadcast signal distribution  
2 system according to claim 6, wherein analog  
3 transmission is performed on the third-named  
4 broadcast distribution signal while being  
5 distributed to each said subscriber terminal in the  
6 CATV network.

1           11. A digital broadcast signal distribution  
2 system according to claim 7, wherein analog  
3 transmission is performed on the third-named  
4 broadcast distribution signal while being  
5 distributed to each said subscriber terminal in the  
6 CATV network.

1           12. A digital broadcast signal distribution  
2 system according to claim 8, wherein analog  
3 transmission is performed on the third-named  
4 broadcast distribution signal while being  
5 distributed to each said subscriber terminal in the  
6 CATV network.

1           13. A digital broadcast signal distribution  
2 system according to claim 1, further comprising a  
3 repeater for relaying the third-named digital  
4 broadcast distribution signal in the CATV network.

1           14. A digital broadcast signal distribution

2 system according to claim 1, wherein the  
3 communication line that communicably connects said  
4 distribution centers is a ring network.

1 15. A digital broadcast signal distribution  
2 system according to claim 1, wherein the first-named  
3 digital broadcast distribution signal and the  
4 second-named digital broadcast distribution signal  
5 of each said distribution center are sent and  
6 received through the communication line via Internet  
7 Protocol (IP).

1 16. A digital broadcast signal distribution  
2 system according to claim 1, wherein the third-named  
3 digital broadcast distribution signal is  
4 distributed to each said subscriber terminal by  
5 using IP multicast.

1 17. A digital broadcast signal distribution  
2 system according to claim 1, wherein each said  
3 subscriber terminal further includes a distribution  
4 plan obtaining section for obtaining the channel  
5 distribution plans that are to be stored in said  
6 distribution plan storage.

1 18. A subscriber terminal for receiving a  
2 digital broadcast distribution signal from one of

3 a plurality of distribution centers, each of which  
4 creates a digital broadcast distribution signal  
5 based on program information received from a  
6 provider, through a CATV (Community Antenna  
7 Television) network so that a subscriber views a  
8 program, said subscriber terminal comprising:

9 a distribution plan storage for retaining  
10 channel distribution plans, one representing  
11 distribution setting information of each of the  
12 plural distribution centers;

13 a distribution center discriminating section  
14 for discriminating the one distribution center that  
15 has created the first-named digital broadcast  
16 distribution signal received in said subscriber  
17 terminal; and

18 a receiving section for changing, if the one  
19 distribution center is discriminated not to be a  
20 predetermined distribution center, NIT information  
21 of the first-named digital broadcast distribution  
22 signal based on the channel distribution plans of  
23 the one distribution center and the predetermined  
24 distribution center, and receiving the first-named  
25 digital broadcast distribution signal.

1 19. A subscriber terminal according to  
2 claim 18, further including a distribution plan  
3 obtaining section for obtaining the channel

4 distribution plans that are to be stored in said  
5 distribution plan storage.

1 20. A subscriber terminal according to claim  
2 19, wherein said distribution plan obtaining section  
3 obtains the channel distribution plans through the  
4 CATV network.

1 21. A subscriber terminal according to claim  
2 19, wherein:

3 each of the channel distribution plans is  
4 distributed in the form of an Entitlement Management  
5 Message (EMM) or an Entitlement Control Message  
6 (ECM); and

7 said distribution plan obtaining section  
8 obtains each of the channel distribution plans from  
9 the EMM or the ECM.

1 22. A subscriber terminal according to claim  
2 20, wherein:

3 each of the channel distribution plans is  
4 distributed in the form of an Entitlement Management  
5 Message (EMM) or an Entitlement Control Message  
6 (ECM); and

7 said distribution plan obtaining section  
8 obtains each of the channel distribution plans from  
9 the EMM or the ECM.



1           23. A subscriber terminal according to claim  
2 19, wherein said distribution plan obtaining section  
3 is communicably connected to a local station through  
4 a public communication line and obtains the channel  
5 distribution plans through the public communication  
6 line.

1           24. A subscriber terminal according to claim  
2 19, wherein said distribution plan obtaining section  
3 is a recording medium reading section for reading  
4 the channel distribution plans from at least one  
5 recording medium in which the channel distribution  
6 plans are stored.

1           25. A subscriber terminal according to claim  
2 18, wherein said distribution center discrimination  
3 section discriminates the one distribution center  
4 based on a toll agency identification code.

1           26. A subscriber terminal according to claim  
2 18, wherein said distribution center discrimination  
3 section discriminates the one distribution center  
4 based on an agency code allocated by a Certification  
5 Authority (CA).

1           27. A subscriber terminal according to claim  
2 18, wherein said distribution center discrimination

3 section discriminates the one distribution center  
4 based on a broadcast service type switching code  
5 (a network ID) or a service ID (S-ID) for a program  
6 selection, which broadcast service type switching  
7 code or service ID is input by an operator.

1 28. A subscriber terminal according to claim  
2 18, wherein, when said subscriber terminal is  
3 installed, the channel distribution plans are stored  
4 in said distribution plan storage.

1 29. A subscriber terminal according to claim  
2 19, wherein, when said subscriber terminal is  
3 installed, the channel distribution plans are stored  
4 in said distribution plan storage.

1 30. A subscriber terminal according to claim  
2 24, wherein, when said subscriber terminal is  
3 installed, the channel distribution plans are stored  
4 in said distribution plan storage.